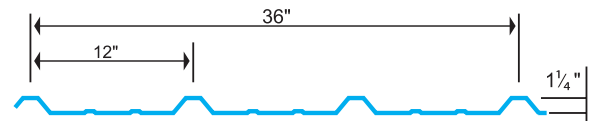


# PBR



## PRODUCT DESCRIPTION

### Description:

This panel may be used for roof and walls. The PBR panel's deep ribs create an even-shadowed appearance. The area between the ribs is reinforced.

### Gauge:

26 standard - 29, 24 and 22 also available

### Lengths:

45' maximum is standard, but longer lengths are available as special requests.

### Dimensions:

36" coverage with 1 1/4" deep ribs.

### Fasteners:

Standard coated or zinc-aluminum cast head screw.

### Finish:

Galvalume Plus® and Signature®

### Usage:

Roof, wall, liner, facade and soffit panel applications.

### Limitations:

Recommended for roof slopes of 1/2:12 or greater. Not designed for coverage over bar joist.

## FEATURE

1 Reverse rolled profile

2 Purlin bearing leg

3 Installation may start at either end

4 Economical profile

5 36" coverage

6 Wind uplift rating

7 Diaphragm action

8 Light transmitting panels

9 Signature® 200 series

10 Signature® 300 option

11 Finish Warranty

## BENEFIT

1 The panel can serve as an alternate wall panel by putting the paint finish on the under side

2 An additional leg is rolled on one side of lap rib to facilitate installation

3 Flexible installation

4 Cost effective

5 Ease of installation

6 The panel qualifies for UL90 in multiple construction numbers

7 The panel configuration enhances diaphragm capabilities for purlin stability

8 Profile light transmitting panels are available for the PBR panel

9 Highly durable silicone polyester paint system with excellent color and gloss retention in addition to superior chalk resistance

10 Fluoropolymer paint system offering the ultimate in color retention and superior resistance to chalking, chemical and UV degradation

11 Used with long-life fasteners, this panel has a 40-year warranty

**ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT**

**ALLOWABLE UNIFORM LOADS NOTES**

**29 Gauge (0.0133" Design Thickness), Fy = 60 ksi, Fu = 61.5 ksi**

SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3	4	5	6	7	8	9
1-SPAN	NEGATIVE WIND LOAD	93.75	52.73	33.75	23.44	17.22	13.18	10.42
	POSITIVE LOAD	67.01	32.53	16.66	9.64	6.07	4.07	2.86
	POSITIVE WIND LOAD	67.01	41.08	26.29	18.26	13.41	10.27	8.11
2-SPAN	NEGATIVE WIND LOAD	61.91	37.19	24.61	17.42	12.96	10.00	7.94
	POSITIVE LOAD	70.40	45.18	30.41	21.75	16.28	12.62	9.40
	POSITIVE WIND LOAD	70.40	45.18	30.41	21.75	16.28	12.62	10.06
3-SPAN	NEGATIVE WIND LOAD	73.01	44.74	29.96	21.37	15.96	12.36	9.84
	POSITIVE LOAD	80.00	53.43	36.52	22.73	14.32	9.59	6.74
	POSITIVE WIND LOAD	80.00	53.43	36.52	26.39	19.89	15.50	12.40
4-SPAN	NEGATIVE WIND LOAD	69.51	42.31	28.22	20.08	14.97	11.58	9.21
	POSITIVE LOAD	77.00	50.82	34.56	24.74	15.58	10.44	7.33
	POSITIVE WIND LOAD	77.00	50.82	34.56	24.89	18.72	14.56	11.63

**26 Gauge (0.0181" Design Thickness), Fy = 60 ksi, Fu = 61.5 ksi**

SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3	4	5	6	7	8	9
1-SPAN	NEGATIVE WIND LOAD	133.48	75.08	48.05	33.37	24.52	18.77	14.83
	POSITIVE LOAD	119.08	52.22	26.74	15.47	9.74	6.53	4.58
	POSITIVE WIND LOAD	119.08	69.83	44.69	31.04	22.80	17.46	13.79
2-SPAN	NEGATIVE WIND LOAD	114.41	66.59	43.33	30.37	22.44	17.24	13.66
	POSITIVE LOAD	105.60	71.09	46.37	32.55	24.07	18.51	13.88
	POSITIVE WIND LOAD	105.60	71.09	46.37	32.55	24.07	18.51	14.66
3-SPAN	NEGATIVE WIND LOAD	138.49	81.62	53.46	37.61	27.86	21.44	17.00
	POSITIVE LOAD	120.00	86.91	57.11	34.86	21.95	14.71	10.33
	POSITIVE WIND LOAD	120.00	86.91	57.11	40.25	29.85	22.99	18.24
4-SPAN	NEGATIVE WIND LOAD	130.70	76.70	50.12	35.22	26.06	20.05	15.89
	POSITIVE LOAD	115.50	81.75	53.58	37.71	23.77	15.93	11.18
	POSITIVE WIND LOAD	115.50	81.75	53.58	37.71	27.93	21.50	17.05

**24 Gauge (0.0223" Design Thickness), Fy = 50 ksi, Fu = 60 ksi**

SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3	4	5	6	7	8	9
1-SPAN	NEGATIVE WIND LOAD	126.37	71.08	45.49	31.59	23.21	17.77	14.04
	POSITIVE LOAD	125.69	70.70	38.51	22.28	14.03	9.40	6.60
	POSITIVE WIND LOAD	125.69	70.70	45.25	31.42	23.09	17.68	13.97
2-SPAN	NEGATIVE WIND LOAD	120.59	69.04	44.56	31.09	22.91	17.57	13.90
	POSITIVE LOAD	117.33	69.40	44.80	31.25	23.03	17.66	13.97
	POSITIVE WIND LOAD	117.33	69.40	44.80	31.25	23.03	17.66	13.97
3-SPAN	NEGATIVE WIND LOAD	148.17	85.44	55.34	38.68	28.53	21.90	17.34
	POSITIVE LOAD	133.33	85.87	55.62	38.89	28.68	19.34	13.58
	POSITIVE WIND LOAD	133.33	85.87	55.62	38.89	28.68	22.02	17.43
4-SPAN	NEGATIVE WIND LOAD	139.13	80.03	51.77	36.16	26.66	20.46	16.19
	POSITIVE LOAD	128.33	80.43	52.04	36.35	26.81	20.57	14.45
	POSITIVE WIND LOAD	128.33	80.43	52.04	36.35	26.81	20.57	16.28

**22 Gauge (0.0286" Design Thickness), Fy = 50 ksi, Fu = 60 ksi**

SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3	4	5	6	7	8	9
1-SPAN	NEGATIVE WIND LOAD	163.85	92.16	58.98	40.96	30.09	23.04	18.21
	POSITIVE LOAD	174.46	98.14	52.70	30.50	19.21	12.87	9.04
	POSITIVE WIND LOAD	174.46	98.14	62.81	43.62	32.04	24.53	19.38
2-SPAN	NEGATIVE WIND LOAD	168.30	96.14	61.98	43.21	31.83	24.41	19.31
	POSITIVE LOAD	158.71	90.50	58.30	40.63	29.91	22.94	18.14
	POSITIVE WIND LOAD	158.71	90.50	58.30	40.63	29.91	22.94	18.14
3-SPAN	NEGATIVE WIND LOAD	207.24	119.12	77.03	53.80	39.67	30.44	24.09
	POSITIVE LOAD	195.75	112.25	72.50	50.61	37.24	24.95	17.52
	POSITIVE WIND LOAD	195.75	112.25	72.50	50.61	37.29	28.61	22.64
4-SPAN	NEGATIVE WIND LOAD	194.44	111.53	72.04	50.29	37.06	28.43	22.50
	POSITIVE LOAD	183.56	105.06	67.79	47.29	34.84	26.54	18.64
	POSITIVE WIND LOAD	183.56	105.06	67.79	47.29	34.84	26.72	21.14

**SECTION PROPERTIES**

PANEL GAUGE	Fy (ksi)	WEIGHT (psf)	NEGATIVE BENDING			POSITIVE BENDING		
			lxe (in. <sup>4</sup> /ft.)	Sxe (in. <sup>3</sup> /ft.)	Maxo (kip-in.)	lxe (in. <sup>4</sup> /ft.)	Sxe (in. <sup>3</sup> /ft.)	Maxo (kip-in.)
29	60*	0.75	0.0215	0.0325	1.2656	0.0238	0.0230	0.9859
26	60*	0.94	0.0309	0.0449	1.8019	0.0382	0.0381	1.6759
24	50	1.14	0.0420	0.0570	1.7060	0.0551	0.0567	1.6968
22	50	1.44	0.0567	0.0739	2.2119	0.0754	0.0787	2.3553

\* Fy is 80-ksi reduced to 60-ksi in accordance with the 2012 edition of the North American Specification For Design Of Cold-Formed Steel Structural Members - A2.3.2.

- Strength calculations based on the 2012 edition of AISI S-100, North American Specification for the Design of Cold-formed Steel Structural Members.
- Allowable strengths given are applicable for uniform loading and spans without significant overhangs.
- POSITIVE LOAD allowable strengths shown are for those loads that push the panel into its supports. The applicable limit states are flexure, shear, combined shear and flexure, web crippling at end and interior supports and span/180 deflection under the identical (strength-level) loads.
- POSITIVE WIND LOAD allowable strengths shown are for those loads that push the panel into its supports. The applicable limit states are flexure, shear, combined shear and flexure, web crippling at end and interior supports and span/60 deflection under a 10-year recurrence wind load, using a 0.7 conversion factor.
- NEGATIVE WIND LOAD allowable strengths are for those loads that pull the panel away from its supports. The applicable limit states are flexure, shear, combined shear and flexure, as well as span/60 under a 10-year recurrence wind load, using a 0.7 conversion factor.
- Panel pullover and Screw pullout allowable strengths must be checked separately using the screws employed for each particular application when utilizing this load chart.
- Effective yield strength (Fy) has been determined in accordance with Section A2.3.2 of AISI-S100.
- The use of any accessories other than those provided by the manufacturer may damage panels, void all warranties and will void all engineering data.
- This material is subject to change without notice. Please contact Robertson Building Systems for most current data.

**SECTION PROPERTY NOTES**

- All calculations for the properties of PBR Roof panels are calculated in accordance with the 2012 edition of the North American Specification For Design Of Cold-Formed Steel Structural Members.
- lxe is for deflection determination.
- Sxe is for bending.
- Maxo is allowable bending moment.
- All values are for one foot of panel width.

The Engineering data contained herein is for the expressed use of customers and design professionals. Along with this data, it is recommended that the design professional have a copy of the most current version of the North American Specification for the Design of Cold-Formed Steel Structural Members published by the American Iron and Steel Institute to facilitate design. This Specification contains the design criteria for cold-formed steel components. Along with the Specification, the designer should reference the most current building code applicable to the project job site in order to determine environmental loads. If further information or guidance regarding cold-formed design practices is desired, please contact the manufacturer.

Galvalume and Galvalume Plus are trademarks of ArcelorMittal in Canada and are trademarks of BIEC International Inc. in the United States. Signature® is a registered trademark of NCI Group Inc.



Corporate Office  
1343 Sandhill Dr., Ancaster, ON L9G 4V5  
800-387-5335 | 905-304-1111 | f 905-304-2420

Western Office  
11318-163 St. NW, Edmonton, AB T5M 1Y6  
780-485-3055 | f 780-461-7785

RobertsonBuildings.com

Robertson Building Systems reserves the right to discontinue products at any time or change specifications and/or designs without incurring obligation. For current product information, inquire or visit RobertsonBuildings.com. Application details are for illustration purposes only and may not be appropriate for all conditions, building designs or panel profiles. If there is a conflict between the preceding and project erection drawings, the erection drawings will take precedence.